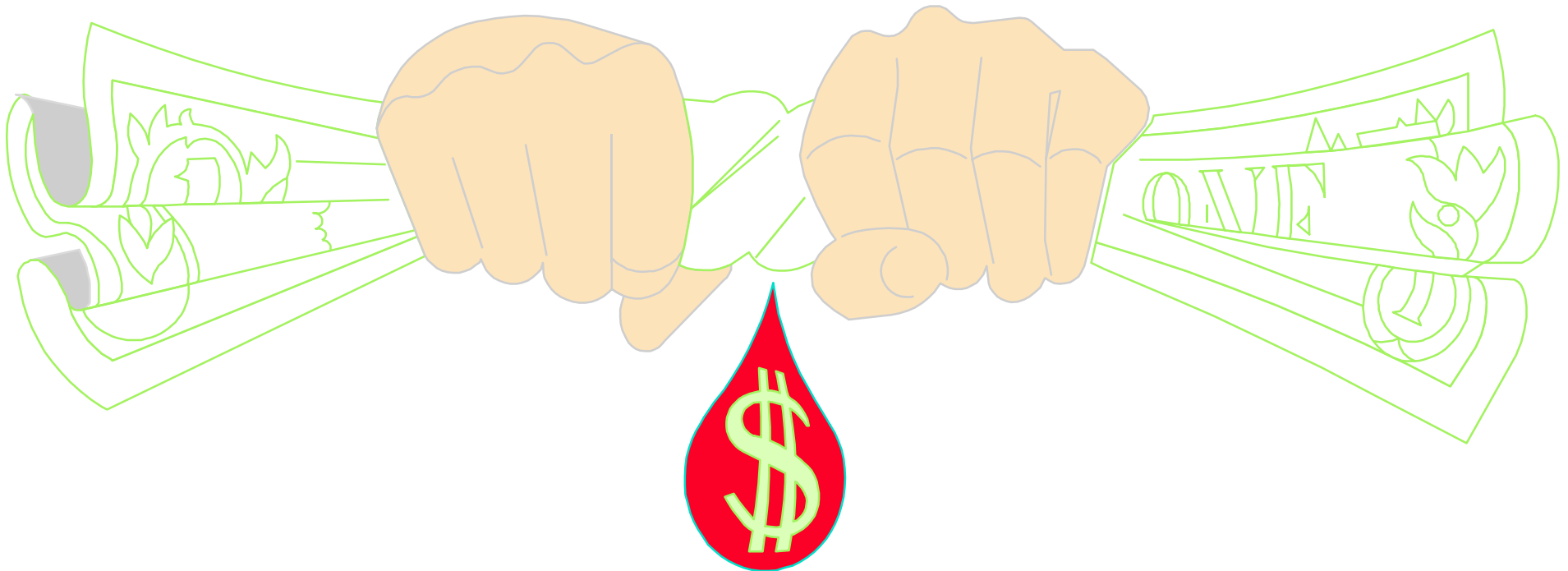




# ***Reducing Total Ownership Cost of Naval Forces***



## ***Briefing to NARSOC***

**Pat Tamburrino, Jr. - Naval Sea Systems Command**

**Ron Rosenthal - Naval Air Systems Command**

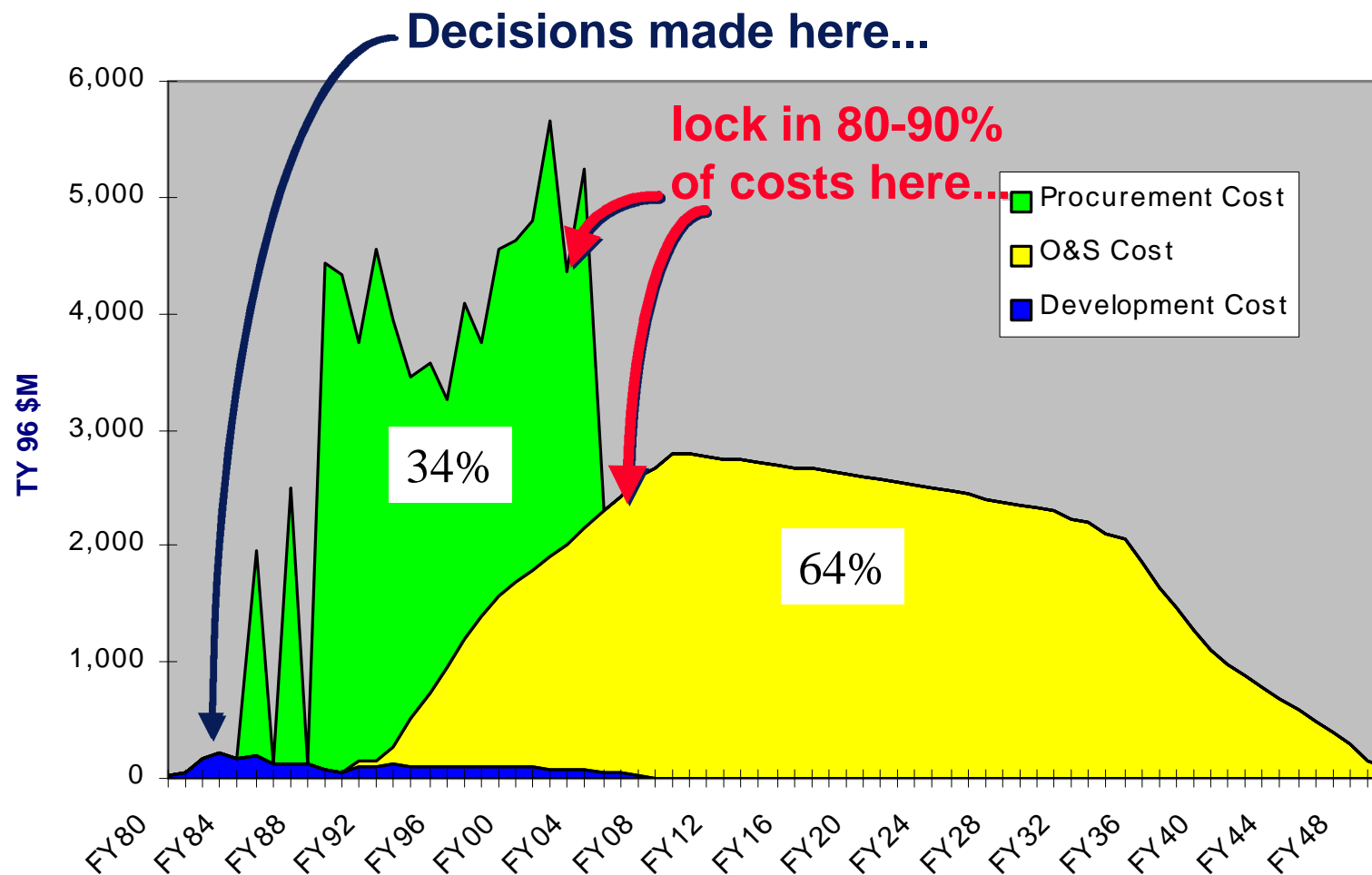
# Why Is This Important ?

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“As to government expenditures, those due to broken down chariots, worn-out horses, armor and helmets, arrows and crossbows, lances, hand and body shields, draft animals and supply wagons will amount to 60% of the total.”

Sun Tzu, *The Art of War*, 6th Century B.C.

# SURFACE COMBATANTS LIFE CYCLE COST



Development: 2%

Procurement: 34%

O&S: 64%

# Purpose

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- ◆ **Outline an integrated Navy approach to reducing Total Ownership Cost (TOC) in response to DSAC initiatives and ASN(RDA) Strategic Goal**
- ◆ **What we want today:**
  - Concurrence from DoN leadership on approach
  - Engender top down support for effort across all major claimants

TOC Baselines will not be established or monitored unless Navy leadership supports concept.

# Tasking

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## **At Dec 97 DSAC Meeting, Dr. Gansler stated that:**

Ambitious top level goals for TOC reduction should be set, responsibilities identified and accountability established.

## **SAEs were directed to:**

Be prepared to discuss service plans for designating TOC reduction programs and their integrated approach for setting and achieving targets and and key innovations they are considering.

Designate pilot programs

- ◆ Not all new acquisitions
- ◆ Need mix from R&D, Production & fielded systems

# ASN(RDA) 1996-1997

## Strategic Plan

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### STRATEGIC GOAL:

*Understand and manage total ownership costs over the entire life cycle to produce savings for recapitalization and modernization.*

### STRATEGY:

*Develop processes, toolsets, and models to support OPNAV force level decisions and the affordability decisions made by Program Managers and Industry from system concept through disposal.*

**This implies an urgency for reducing near-term operating & support costs**

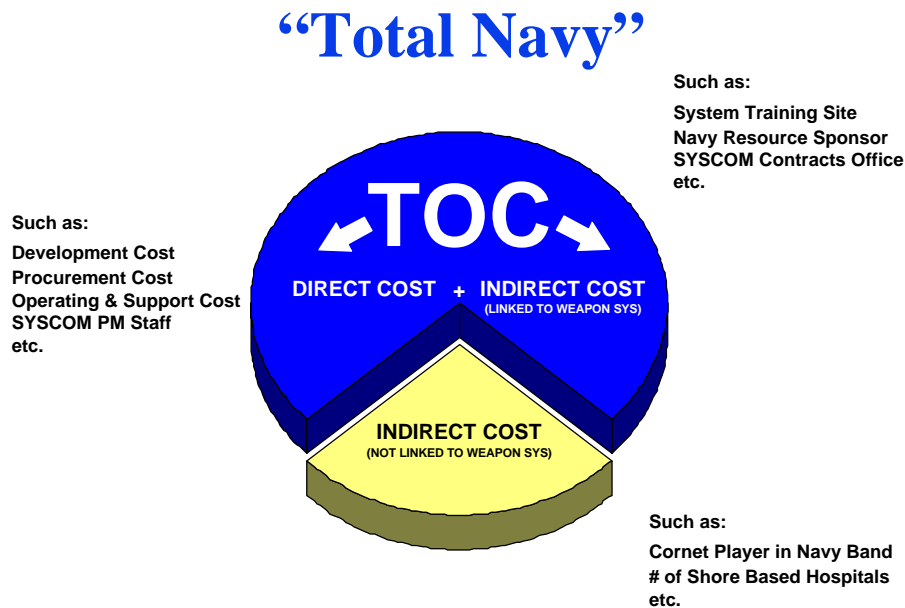


# Total Ownership Cost (TOC)

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## Definition:

*“Total Ownership Cost includes all costs associated with the research, development, procurement, operation, logistical support and disposal of an individual weapon system including the total supporting infrastructure that plans, manages and executes that weapon system program over its full life.”*



And: *“The cost of requirements for common support items and systems that are incurred because of introduction of that weapon system.”*

But: *“Excludes indirect “non-linked” Navy infrastructure costs that are not affected by individual weapon systems’ development, introduction, deployment or operations.”*

# Relationship of TOC and CAIV

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## *TOC is a Noun*

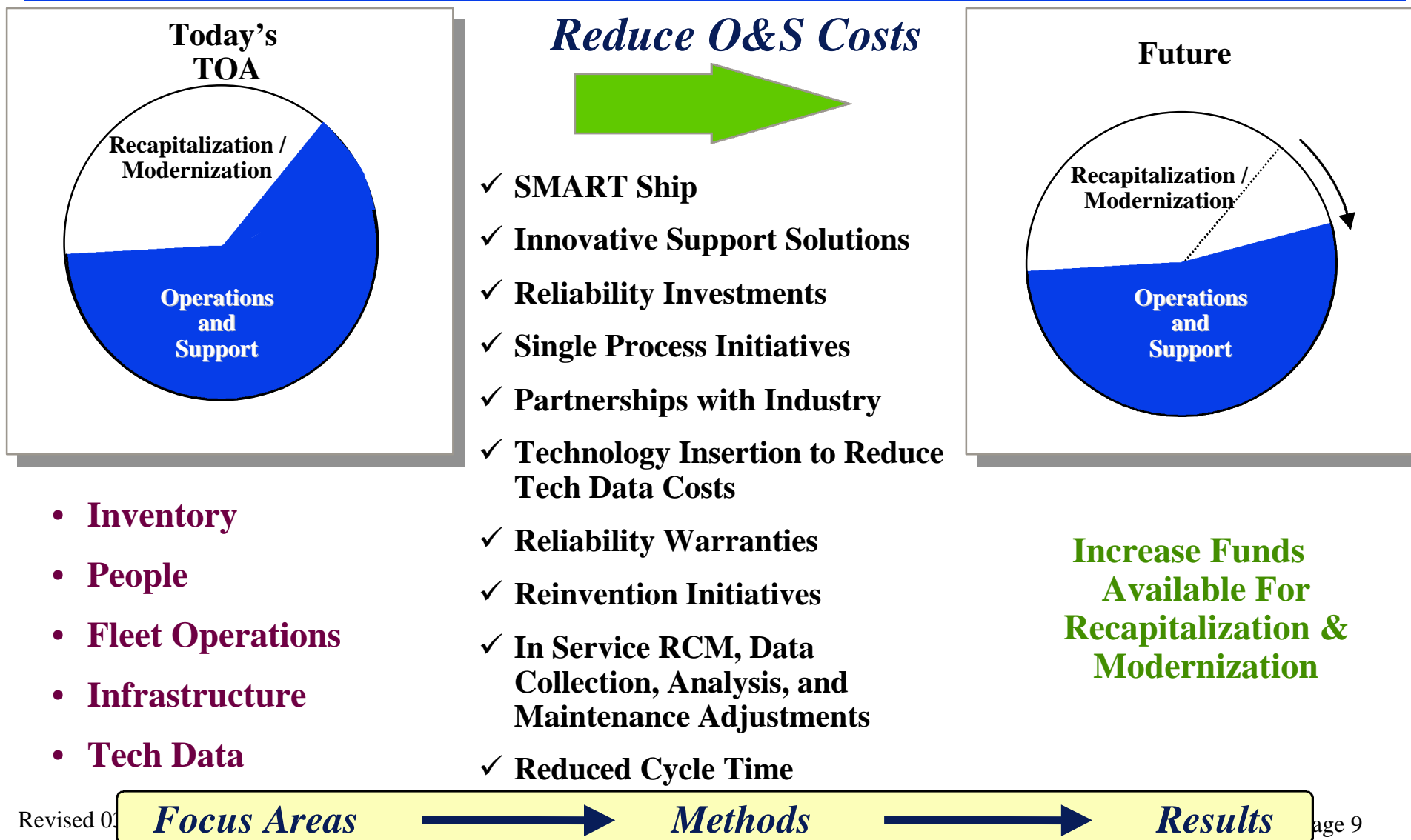
TOC is an inclusive concept of the totality of costs associated with a weapon system *which is to be managed, and if possible, to be reduced in a reformed and improved acquisition process.*

## *CAIV is a Verb*

CAIV is *a means for managing cost; a behavioral paradigm shift in which costs are not accepted, but challenged.*



# Emphasis on Reducing O&S Cost of Naval Forces



# Challenges to TOC Implementation

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## Challenge

1. Increased RDT&E Funding
2. LCC Tools (Models & Databases)
3. Fleet Involvement
4. Sponsor Involvement
5. Incorporate TOC Strategies into Program Baselines
6. Realize that Some DoN Costs are Fixed
7. No Management Reserve
8. Incentives to Industry and PM
9. Comptroller Buy-in

## Recommendation

1. DoN Sponsor Should POM an Investment Pool for DoN
2. Institutionalized Funding Needs to be Formally Supported by the DoN Resource Sponsor
3. PMs Need to Include Fleet as Part of Legitimate Stakeholder Community
4. Requirements Community Assists in Setting Goals; TOC KPP in ORD
5. MDAs Need to Insure Strategies are Addressed in APBs (KPP for Tracking TOC)
6. Focus on Big Drivers and Don't Expect Accounting Precision
7. Couple to DoN Stability Reserve
8. GMB Investigate Defense and Commercial Incentives
9. Goals Need to be Validated Before Resources are Reprogrammed. Mechanism to Rebate Program Adjustments.

# Engage the Full Range of Players

No single entity has the full range of required data

MR&A

OPNAV



Comptroller

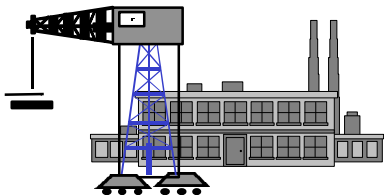
Training



PM / PEO  
SYSCOM



Fleet /  
Fleet Support Team



Depots



Subsystem /  
Other Programs



NAVICP / Supply

# Recommended Approach

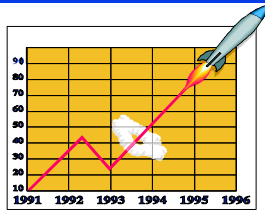
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- ◆ **Use NAVAIR's "Affordable Readiness" Effort As Template and Adapt to All Major Acquisition Syscoms/related PEO Programs (All ACAT and Other Programs of Interest)**
- ◆ **Use VAMOSC As Primary O&S Cost Data Source**
- ◆ **Fully Engage the Full Range of Players**
  - Fleet, PMs, NAVCOMPT, Warfare Sponsors
  - Drive Out Fear
- ◆ **Identify Cost Drivers and Areas of Attack**
  - In-service and Future Acquisitions
- ◆ **PMs/PEOs Develop Goals**
- ◆ **Develop Investment/Payoff Strategies/Metrics**
- ◆ **TOC GMB Lead on Top Level Approach and Build Templates**

# Process Roadmap



**COLLECT  
DATA  
&  
BASELINE**



**IDENTIFY  
COST  
DRIVERS**

**PRICES AS RISEN  
PRICES SLASHED**

**DEVELOP  
INITIATIVES**



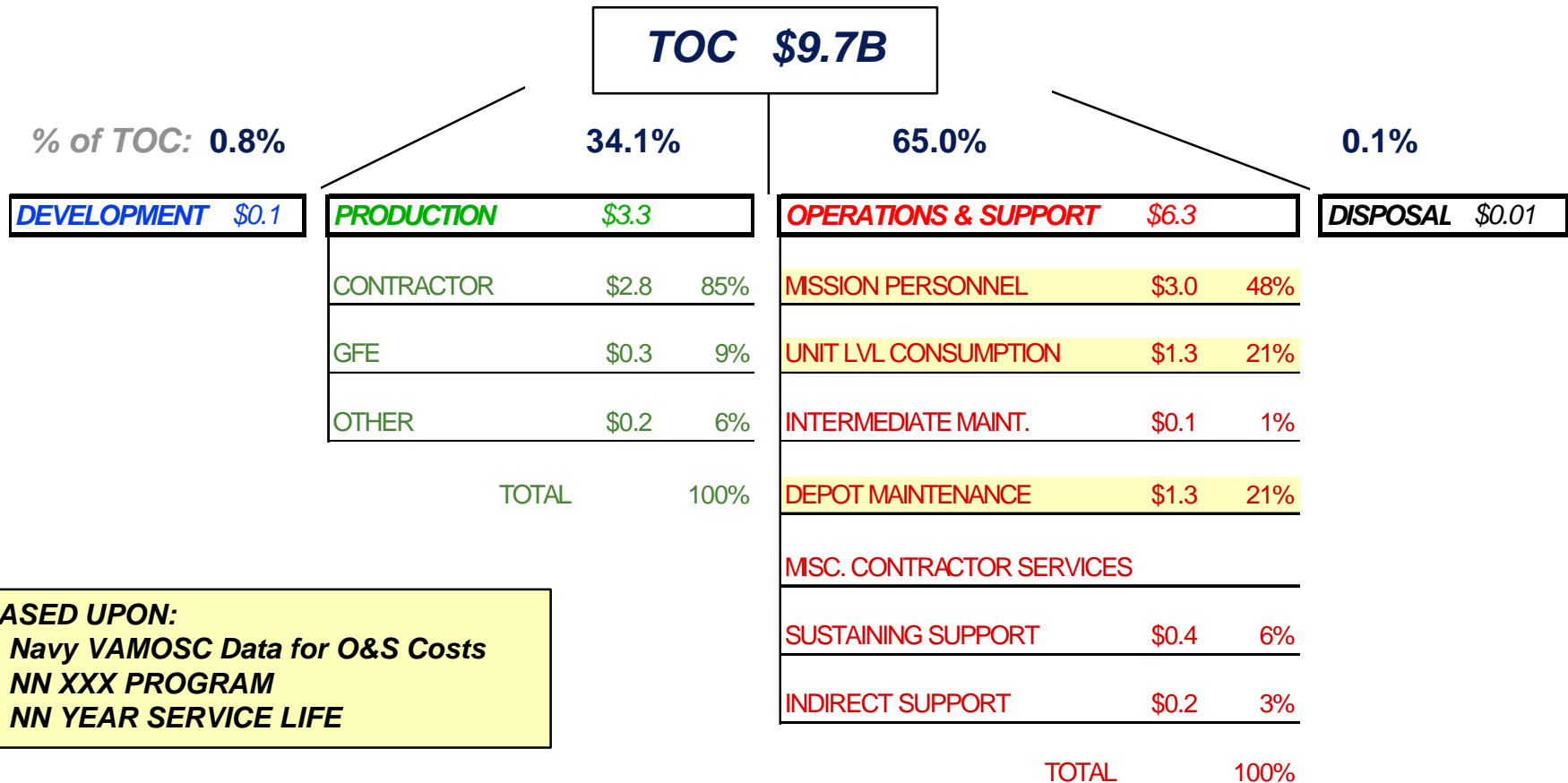
**TOC  
REDUCTION  
PLAN**



**METRICS  
&  
MONITOR**

**FLEET  
&  
OTHER  
STAKEHOLDERS**

# XXX TOC - Cost Elements - CY98 \$B



|                    |       |                      |        |
|--------------------|-------|----------------------|--------|
| <b>SUNK COSTS:</b> |       |                      |        |
| DEVELOPMENT        | \$0.1 | PRODUCTION           | \$3.3  |
|                    |       | OPERATIONS & SUPPORT | \$1.6  |
|                    |       | DISPOSAL             | \$0.00 |

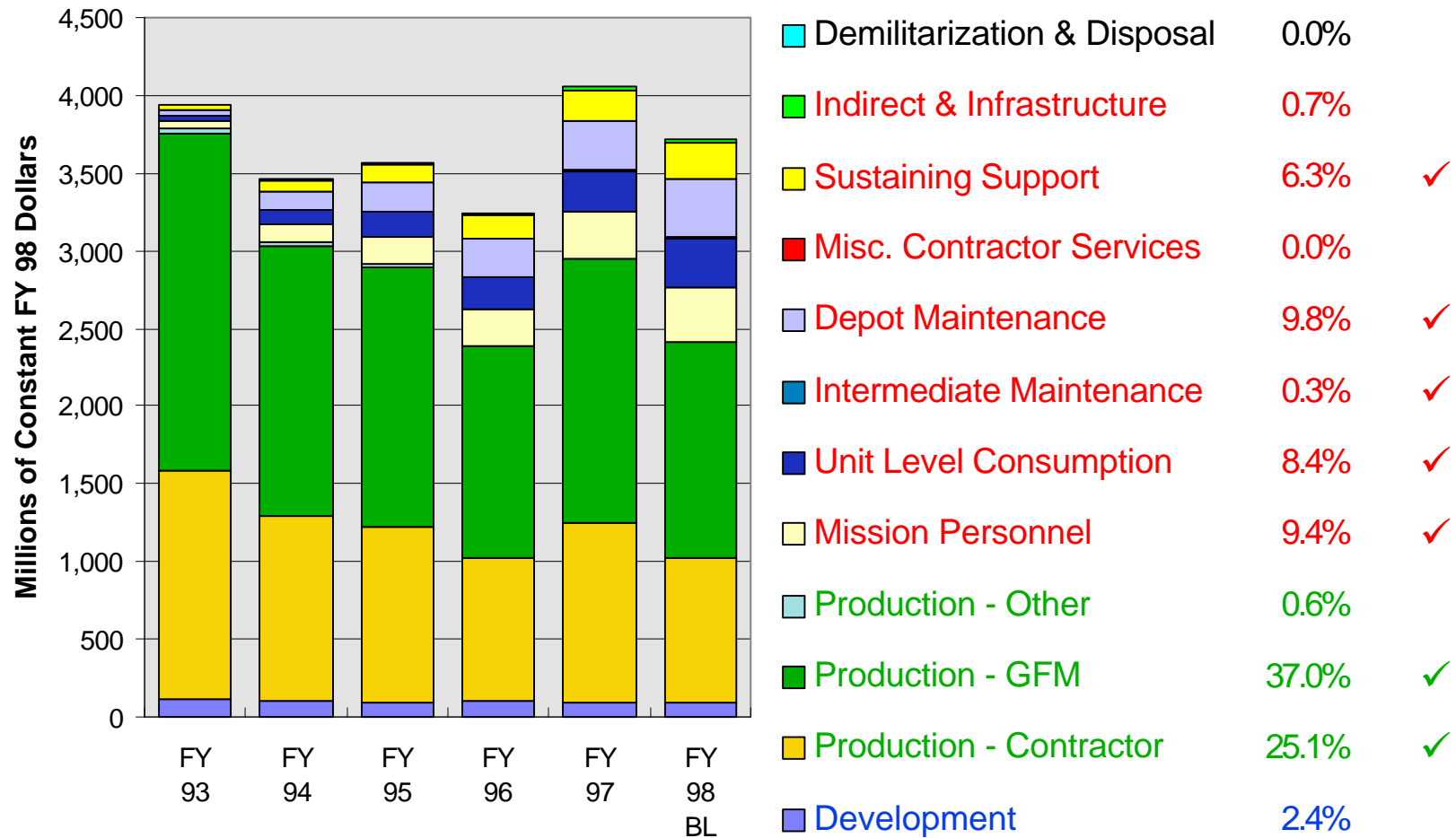
  

|                      |       |                      |        |
|----------------------|-------|----------------------|--------|
| <b>FUTURE COSTS:</b> |       |                      |        |
| DEVELOPMENT          | \$0.0 | PRODUCTION           | \$0.0  |
|                      |       | OPERATIONS & SUPPORT | \$4.7  |
|                      |       | DISPOSAL             | \$0.01 |

Updated Annually - 971111

# FIVE YEAR HISTORICAL COST TREND

## For XYZ



|               | FY 93 | FY94   | FY 95  | FY 96  | FY 97  | FY 98  |
|---------------|-------|--------|--------|--------|--------|--------|
| No. of Units  | 2     | 5      | 8      | 10     | 14     | 17     |
| Op Hrs        | 6,945 | 16,595 | 27,169 | 34,789 | 52,356 | 58,457 |
| Op Hrs / Unit | 3,473 | 3,319  | 3,396  | 3,479  | 3,740  | 3,439  |

✓ = TOC Reduction Strategy Defined

# Program Baseline

## XYZ Projected Hours & Costs without Initiatives:

### *Cost Profile (Current) in FY 98 \$K:*

|  | FY 98     | FY 99     | FY 00     | FY 01     | FY 02     | FY 03     | FY 04     | FY 05     | FY 06     | FY 07     | To Complete |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| <b>Development</b>                     | 89,649    | 104,969   | 97,476    | 88,854    | 73,116    | 73,101    | 73,098    | 55,099    | 38,909    | 20,944    | 47,132      |
| <b>Total Procurement</b>               | 2,347,679 | 2,997,121 | 2,934,666 | 3,007,132 | 3,741,567 | 2,336,849 | 3,062,951 | 0         | 0         | 0         | 0           |
| <b>Procurement - Contractor</b>        | 939,072   | 1,198,848 | 1,173,859 | 1,202,853 | 1,496,627 | 934,740   | 1,225,180 | 0         | 0         | 0         | 0           |
| <b>Procurement - GFM</b>               | 1,385,131 | 1,768,301 | 1,731,441 | 1,774,208 | 2,207,524 | 1,378,741 | 1,807,141 | 0         | 0         | 0         | 0           |
| <b>Procurement - Other</b>             | 23,477    | 29,971    | 29,367    | 30,071    | 37,416    | 23,369    | 30,630    | 0         | 0         | 0         | 0           |
| <b>Total Operating &amp; Support</b>   | 1,302,485 | 1,454,551 | 1,604,187 | 1,701,565 | 1,848,812 | 1,945,830 | 2,092,857 | 2,239,114 | 2,383,352 | 2,575,067 | 114,886,919 |
| <b>Mission Personnel</b>               | 351,671   | 392,729   | 433,130   | 459,422   | 499,179   | 525,374   | 565,071   | 604,561   | 643,505   | 695,268   | 31,019,468  |
| <b>Unit Level Consumption</b>          | 312,596   | 349,092   | 385,005   | 408,376   | 443,715   | 466,999   | 502,286   | 537,387   | 572,005   | 618,016   | 27,572,861  |
| <b>Intermediate Maintenance</b>        | 13,025    | 14,546    | 16,042    | 17,016    | 18,488    | 19,458    | 20,929    | 22,391    | 23,834    | 25,751    | 1,148,869   |
| <b>Depot Maintenance</b>               | 364,696   | 407,274   | 449,172   | 476,438   | 517,667   | 544,832   | 586,000   | 626,952   | 667,339   | 721,019   | 32,168,337  |
| <b>Misc. Contractor Services</b>       |           |           |           |           |           |           |           |           |           |           | 0           |
| <b>Sustaining Support</b>              | 234,447   | 261,819   | 288,754   | 306,282   | 332,786   | 350,249   | 376,714   | 403,041   | 429,003   | 463,512   | 20,679,645  |
| <b>Indirect &amp; Infrastructure</b>   | 26,050    | 29,091    | 32,084    | 34,031    | 36,976    | 38,917    | 41,857    | 44,782    | 47,667    | 51,501    | 2,297,738   |
| <b>Demilitarization &amp; Disposal</b> |           |           |           |           |           |           |           |           |           |           | 1,360,000   |
| <b>TOTAL</b>                           | 3,739,813 | 4,556,642 | 4,636,330 | 4,797,551 | 5,663,494 | 4,355,780 | 5,228,906 | 2,294,214 | 2,422,261 | 2,596,012 | 116,294,051 |

### *Inventory Profile (Current):*

|                       | FY 98  | FY 99  | FY 00  | FY 01  | FY 02  | FY 03   | FY 04   | FY 05   | FY 06   | FY 07   | To Complete |
|-----------------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|-------------|
| <b>Total Units</b>    | 17     | 20     | 23     | 25     | 28     | 30      | 31      | 34      | 37      | 39      | 1,704       |
| <b>Total Op Hours</b> | 59,500 | 70,000 | 80,500 | 87,500 | 98,000 | 105,000 | 108,500 | 119,000 | 129,500 | 136,500 | 5,964,000   |
| <b>Fuel</b>           | 46,889 | 52,364 | 57,751 | 61,256 | 66,557 | 70,050  | 75,343  | 80,608  | 85,801  | 92,702  | 4,135,929   |



# XYZ

## Initiatives Summary

|  |   |
|--|---|
| ● <b>RINU</b>                                      | Replacement of the inertial navigation system with a newer more reliable system   |
| ● <b>Air Starter Turbine</b>                       | Increase reliability of the unit through improvements in seal and bearing changes   |
| ● <b>Air Flow Multiplier</b>                       | Replace current unreliable and uneconomical to repair units with Commercial-Off-The Shelf hardware                                      |
| ● <b>SSRGA (ASW-31)</b>                            | Proposed F3 replacement with Solid State component resulting in an increase of MTBD of 126 to 45,000 hours                              |
| ● <b>Isochronal Scheduled Inspection System</b>    | Revising scheduled “O” level inspections to calendar based schedule should reduce unscheduled O-level manhours by up to 10%             |
| ● <b>Commercial Phased Depot Maintenance (PDM)</b> | PDM instead of SDLM and insure maintenance is performed in the most effective location and manner that still meets fleet requirements   |
| ● <b>APU</b>                                       | Combination of LECP, incorporation of improved design, and RCM analysis to reduce repair/replacement costs                              |
| ● <b>Propeller Improvements</b>                    | Improve training and troubleshooting procedures/fleet practices to decrease “No Failures”, and improve seals to reduce leakage          |
| ● <b>Fuel Nozzles</b>                              | Establish specialized “T” level standards and “O” & “T” troubleshooting.  |
| ● <b>O to D Maintenance Concept</b>                | Eliminates one level of maintenance. Reduces transportation and maintenance cost and eliminate need for test sets at 2 weapon stations. |

### INITIATIVE PROFILE

Program ID:  Code of Owner:

Initiative Title:

Initiative Summary Description:

|   |   |  |  |
|---|---|--|--|
| <b>Initiative Type:</b><br>LECF <input type="checkbox"/><br>Reliability Improv <input type="checkbox"/><br>Maint Concept <input type="checkbox"/><br>RCM <input type="checkbox"/><br>Rightsourcing <input type="checkbox"/> | Modifications <input type="checkbox"/><br>Obsolescence <input type="checkbox"/><br>IPT/CSS <input type="checkbox"/><br>CIP <input type="checkbox"/><br>Other <input type="checkbox"/> | <b>Initiative Status:</b><br>Active <input checked="" type="checkbox"/><br>Planned <input type="checkbox"/><br>Unfunded <input type="checkbox"/> | <b>Readiness Effect:</b><br>Increase <input type="checkbox"/><br>Decrease <input type="checkbox"/><br>No Change <input type="checkbox"/> |
|---|---|--|--|

**Present Value Ratio:**  
 PVR Ratio:  Planned Start Date:  Break Even Date:   
 Project Life (yrs):

#### Projected Profile in \$K:

| Fiscal Year                     | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   |
|---------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| APN / SCN / WPN                 | 156.0 |       |       |       |       |       |        |        |        |        |        |        |        |        |
| OPN                             |       | 58.0  | 58.0  | 58.0  | 58.0  |       |        |        |        |        |        |        |        |        |
| O&MN                            |       | 135.0 | 175.0 | 150.0 | 125.0 | 75.0  |        |        |        |        |        |        |        |        |
| RDTE&                           |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Other                           |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Total Investment Required       | 156.0 | 193.0 | 233.0 | 208.0 | 183.0 | 75.0  | -      | -      | -      | -      | -      | -      | -      | -      |
| Present Value of Investment     | 153.3 | 183.1 | 213.4 | 183.9 | 156.2 | 61.8  | -      | -      | -      | -      | -      | -      | -      | -      |
| <b>Projected Cost Avoidance</b> |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Development                     |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Production - Contractor         |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Production - GFM                |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Production - Other/Gov't        |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Mission Personnel               |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Unit Level Consumption          |       |       | 25.0  | 50.0  | 75.0  | 100.0 | 125.0  | 125.0  | 125.0  | 125.0  | 125.0  | 125.0  | 125.0  | 125.0  |
| Intermediate Maintenance        |       |       | 75.0  | 150.0 | 125.0 | 140.0 | 160.0  | 160.0  | 160.0  | 160.0  | 160.0  | 160.0  | 160.0  | 160.0  |
| Depot Maintenance               |       |       |       |       |       |       | (25.0) | (25.0) | (25.0) | (25.0) | (25.0) | (25.0) | (25.0) | (25.0) |
| Misc. Contractor Services       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Sustaining Support              |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Indirect & Infrastructure       |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Demilitarization & Disposal     |       |       |       |       |       |       |        |        |        |        |        |        |        |        |
| Total Cost Avoidance            | -     | -     | 100.0 | 200.0 | 200.0 | 240.0 | 260.0  | 260.0  | 260.0  | 260.0  | 260.0  | 260.0  | 260.0  | 260.0  |
| Present Value of Cost Avoidance | -     | -     | 91.6  | 176.9 | 170.8 | 197.8 | 206.9  | 199.8  | 192.9  | 186.2  | 179.8  | 173.6  | 167.6  | 161.8  |

Date Prepared:  Initiative  of

|                 |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Cum. Investment | 156.0   | 349.0   | 582.0   | 790.0   | 973.0   | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 | 1,048.0 |
| Cum. Avoidance  | -       | -       | 100.0   | 300.0   | 500.0   | 740.0   | 1,000.0 | 1,260.0 | 1,520.0 | 1,780.0 | 2,040.0 | 2,300.0 | 2,560.0 | 2,820.0 |
| Difference      | (156.0) | (349.0) | (482.0) | (490.0) | (473.0) | (308.0) | (48.0)  | 212.0   | 472.0   | 732.0   | 992.0   | 1,252.0 | 1,512.0 | 1,772.0 |

|                       |       |       |       |       |       |       |       |         |         |         |         |         |         |         |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|
| Cum Investment (P.V.) | 153.3 | 336.4 | 549.8 | 733.7 | 890.0 | 951.8 | 951.8 | 951.8   | 951.8   | 951.8   | 951.8   | 951.8   | 951.8   | 951.8   |
| Cum Avoidance (P.V.)  | -     | -     | 91.6  | 268.5 | 439.2 | 637.1 | 844.0 | 1,043.8 | 1,236.7 | 1,422.9 | 1,602.7 | 1,776.3 | 1,943.9 | 2,105.7 |
| Fiscal Year           | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    |

#### Actuals in \$K:

| Fiscal Year:                 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| APN / SCN / WPN              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| OPN                          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| O&MN                         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RDTE&                        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Other                        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Investment             | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| <b>Actual Cost Avoidance</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

# Investment/Cost Avoidance View

Program: ABC

*In Constant FY 98 \$K*

|  | Prev Cum. | FY 98    | FY 99    | FY 00    | FY 01    | FY 02    | FY 03   | FY 04   | FY 05 | FY 06 | FY 07  | To Complete | Total  |
|--|-----------|----------|----------|----------|----------|----------|---------|---------|-------|-------|--------|-------------|--------|
| <b>Direct Vendor Delivery</b> Start Date: 35,886 End Date: 39,326 Break Even Date: N/A           |           |          |          |          |          |          |         |         |       |       |        |             |        |
| Investment   | -         | -        | 517      | 500      | 439      | 459      | 368     | 314     | 283   | 295   | 191    | 955         | 4,321  |
| Projected Cost Avoidance   | -         | -        | 665      | 680      | 587      | 591      | 459     | 384     | 335   | 342   | 255    | 3,825       | 8,123  |
| Cumulative Net   | -         | -        | 148      | 328      | 476      | 608      | 699     | 769     | 821   | 868   | 932    | 3,802       |        |
| <b>EGI</b> Start Date: 35,674 End Date: 38,961 Break Even Date: FY-04                            |           |          |          |          |          |          |         |         |       |       |        |             |        |
| Investment   | -         | 6,574    | 7,845    | 3,367    | 1,316    | -        | -       | -       | -     | -     | -      | -           | 19,102 |
| Projected Cost Avoidance   | -         | -        | 653      | 2,257    | 3,645    | 3,536    | 3,373   | 3,318   | 3,210 | 2,611 | 2,339  | 35,085      | 60,027 |
| Cumulative Net   | -         | (6,574)  | (13,766) | (14,876) | (12,547) | (9,011)  | (5,638) | (2,320) | 890   | 3,501 | 5,840  | 40,925      |        |
| <b>Television Camera Replacement</b> Start Date: 35,431 End Date: 39,326 Break Even Date: FY- 03 |           |          |          |          |          |          |         |         |       |       |        |             |        |
| Investment   | -         | 4,056    | 3,042    | 3,042    | -        | -        | -       | -       | -     | -     | -      | -           | 10,140 |
| Projected Cost Avoidance   | -         | -        | 1,210    | 990      | 2,653    | 2,468    | 2,213   | 2,015   | 1,691 | 1,374 | 934    | 14,010      | 29,558 |
| Cumulative Net   | -         | (4,056)  | (5,888)  | (7,940)  | (5,287)  | (2,819)  | (606)   | 1,409   | 3,100 | 4,474 | 5,408  | 19,418      |        |
| <b>TOTALS</b>  |           |          |          |          |          |          |         |         |       |       |        |             |        |
| Investment   | -         | 10,630   | 11,404   | 6,909    | 1,755    | 459      | 368     | 314     | 283   | 295   | 191    | 955         | 32,608 |
| Projected Cost Avoidance   | -         | -        | 2,528    | 3,927    | 6,885    | 6,595    | 6,045   | 5,717   | 5,236 | 4,327 | 3,528  | 52,920      | 44,788 |
| Cumulative Net   | -         | (10,630) | (19,506) | (22,488) | (17,358) | (11,222) | (5,545) | (142)   | 4,811 | 8,843 | 12,180 | 64,145      |        |

## Potential

|  | Prev Cum. | FY 98 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | To Complete | Total  |
|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|--------|
| <b>I-Level Test for Multi-Display Indicator</b> Start Date: 2nd Qtr 98 End Date: FY 06 Break Even Date: 3rd Qtr 98 |           |       |       |       |       |       |       |       |       |       |       |             |        |
| Investment   | -         | -     | 34    | -     | -     | -     | -     | -     | -     | -     | -     | -           | 34     |
| Projected Cost Avoidance   | -         | -     | 227   | 400   | 350   | 318   | 256   | 195   | 127   | 104   | -     | -           | 1,976  |
| Cumulative Net   | -         | -     | 193   | 593   | 942   | 1,260 | 1,516 | 1,711 | 1,838 | 1,942 | 1,942 | 1,942       |        |
| <b>IBM Mini-computer &amp; Software Offload</b> Start Date: 2nd Qtr 98 End Date: FY 06 Break Even Date: 1st Qtr 00 |           |       |       |       |       |       |       |       |       |       |       |             |        |
| Investment   | -         | -     | 384   | -     | -     | -     | -     | -     | -     | -     | -     | -           | 384    |
| Projected Cost Avoidance   | -         | -     | -     | -     | 884   | 884   | 884   | 884   | 884   | 884   | 884   | 13,260      | 19,448 |
| Cumulative Net   | -         | -     | (384) | (384) | 500   | 1,384 | 2,268 | 3,152 | 4,036 | 4,920 | 5,804 | 19,064      |        |
| <b>TOTALS</b>  |           |       |       |       |       |       |       |       |       |       |       |             |        |
| Investment   | -         | -     | 418   | -     | -     | -     | -     | -     | -     | -     | -     | -           | 418    |
| Projected Cost Avoidance   | -         | -     | 227   | 400   | 1,234 | 1,202 | 1,140 | 1,079 | 1,011 | 988   | 884   | 13,260      | 21,424 |
| Cumulative Net   | -         | -     | (191) | 209   | 1,442 | 2,644 | 3,784 | 4,863 | 5,874 | 6,862 | 7,746 | 21,006      |        |

# Implementation Risks

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- ◆ **Define methodology to identify and take credit for TOC reductions already achieved**
- ◆ **“Tighten the belt only once”**
  - Once TOC baseline established and approved don’t re-visit for further reductions
- ◆ **Drive PM fear out**
  - No punitive impact for falling short of TOC goals
  - Don’t make TOC a data gathering exercise; manage with it!
  - Provide “seed corn” ... RDT&E for TOC innovation
- ◆ **ASN(RD&A) resources to manage TOC**

# Timeline

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- ◆ **ASN(RDA) Strategic Plan** **Apr 96**  
TOC GMB established
- ◆ **DSAC Tasking** **Dec 97**
- ◆ **TOC GMB Tasked** **Dec 97**
- ◆ **Generic Templates & Guidebook** **Mar 98**
- ◆ **Train Commands** **Apr/May 98**
- ◆ **Feedback on Process/Templates** **Apr/May 98**
- ◆ **Navy's Pilot Programs Targeted** **Jun 98**
- ◆ **All Navy Programs Implemented**  
**ACAT I/II** **Jul-Dec 98**  
**ACAT III/IV** **Jul 98-Jun 99**

# Website

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## Naval Sea Systems Command

### NAVSEA 017 Cost Engineering & Industrial Analysis Division

**URL: <http://www.navsea.navy.mil/sea017/toc.htm>**

**(Under construction)**

- » Templates and guidebooks to reside here
- » Complete access to generic info across DoD

# **Recommendation**

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**Proceed with plan**